

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
2002 Cost Ceilings

Cost Ceiling Item Code	Item Description	Unit of Measure	2002 Cost Ceiling Amount
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SUPPLEMENTAL UNIT RATES

PERSONNEL RATES

1	Professional Services Rates: Principal Level	\$/Hour	\$124
2	Professional Services Rates: Senior Level	\$/Hour	\$107
3	Professional Services Rates: Project Level	\$/Hour	\$90
4	Professional Services Rates: Staff Level	\$/Hour	\$76
5	Professional Services Rates: Field Level	\$/Hour	\$64
6	Professional Services Rates: Technical Personnel (Computer Included)	\$/Hour	\$56
7	Professional Services Rates: Administrative Assistant	\$/Hour	\$47
8	Professional Services Rates: Word Processor (Computer Included)	\$/Hour	\$40

CONSTRUCTION/CONTRACTING PERSONNEL RATES

9	Construction/Contracting Services Rates: Construction Field Supervisor	\$/Hour	\$81
10	Construction/Contracting Services Rates: Skilled Laborer	\$/Hour	\$51
11	Construction/Contracting Services Rates: Unskilled Laborer	\$/Hour	\$40
12	Construction/Contracting Services Rates: Equipment Operator (Avg. Rate to Operate a Std. Piece of Equip)	\$/Hour	\$60

PER DIEM RATES

13	Per Diem Requirement (# Miles Required)	# Miles	92
14	Fieldwork Per Diem Without Overnight Stay	\$/Day	\$40
15	Fieldwork Per Diem With Overnight Stay (Incl. Lodging)	\$/Day	\$106

CONSULTANT MILEAGE RATE

16	Consultant Mileage Rate (single person)	\$/Mile	\$2
17	Consultant Mileage Rate (two persons)	\$/Mile	\$4

PROJECT SET-UP AND ADMINISTRATION

18	Initial Project Set-up	Lump Sum	\$1,012
19	Previously Assessed Project Review	Lump Sum	\$1,867
20	Agency Data Analysis	Lump Sum	\$1,581
21	Site Reconnaissance and Field Receptor Survey [1/4 Mile]	Lump Sum	\$1,607
22	Agency Receptor Survey [1/4 Mile]	Lump Sum	\$1,013
23	Historical Research	Lump Sum	\$1,359
24	Pursuit of Off-Site Access Agreement with a Private Entity Only	Lump Sum	\$1,257

WORK PLAN PREPARATION

25	Approved Site Characterization Work Plan Scenario 1: Soil Only	\$/Report	\$3,968
26	Approved Site Characterization Work Plan Scenario 2: Soil and Groundwater	\$/Report	\$5,190
27	Initial Health and Safety Plan	\$/Report	\$701

REMEDIAL PLANS

28	ADEQ-Approved CAP for Active Remedial Treatment	Per CAP	\$7,074
29	ADEQ-Approved CAP for Natural Attenuation	Per CAP	\$6,845
30	Pre-Built Remedial Engineering Design	Per Design	\$5,965
31	Consultant Preparation of SAF Work Plan to Implement approved CAP	Per Plan	\$3,797
32	Remediation Health & Safety Plan	Per Plan	\$1,149

FIELD ACTIVITIES

33	Consultant's Full Day Rate	Per Day	\$1,228
34	Consultant's Half Day Rate	Per Half Day	\$794

CONTRACTOR UST REMOVAL AND CLOSURE

35	Contractor Mobilization/Demobilization	Per Event	\$717
36	Contractor Mobilization/Demobilization Incremental Travel Rate	Per Mile	\$5
37	Contractor Daily Travel Costs	Per Mile	\$5

UST REMOVAL

38	One UST Less than or Equal to 4,000-gallons	Per Tank	\$6,029
39	Cost for Each Additional Tank	Per Tank	\$3,068
40	One UST Greater than 4,000-gallons and Less than or Equal to 15,000-gallons	Per Tank	*****
41	Cost for Each Additional Tank	Per Tank	\$5,895
42	One UST Greater than 15,000-gallons	Per Tank	*****
43	Cost for Each Additional Tank	Per Tank	\$8,229

OFF-SITE TRANSPORTATION OF TANKS

44	One UST Less Than or Equal to 4,000-gallons	Per Mile	\$4
45	Cost for Each Additional Tank	Per Mile	\$3
46	One UST Greater than 4,000-gallons and Less than or Equal to 15,000-gallons	Per Mile	\$7
47	Cost for Each Additional Tank	Per Mile	\$6
48	One UST Greater than 15,000-gallons	Per Mile	\$14
49	Cost for Each Additional Tank	Per Mile	\$13

CONTRACTOR DRILLING-RELATED ACTIVITIES - SOIL BORING AND SAMPLING Mobilization/Demobilization

50	Hollow Stem Auger Drilling Method	Per Event	\$514
51	All other Drilling Methods	Per Event	\$609

SOIL BORING AND SAMPLING TRAVEL RATE

52	Hollow Stem Auger Drilling Method	Per Mile	\$4
53	All other Drilling Methods	Per Mile	\$5
54	Soil Boring and Sampling Travel Rate	Per Mile	\$4

SOIL BORING AND SAMPLING

55	Hollow Stem Auger Drilling Method-Vertical Boring	Per Foot	\$22
56	Hollow Stem Auger Drilling Method-Angle Boring	Per Foot	\$28
57	Limited Access Drilling Method-Vertical Boring	Per Foot	\$37
58	Air Rotary Drilling Method-Vertical Boring	Per Foot	\$39
59	Rotosonic Drilling Method-Vertical Boring	Per Foot	\$43
60	Dual Wall Percussion Drilling Method-Vertical Boring	Per Foot	\$42
61	Dual Wall Percussion Drilling Method-Angle Boring	Per Foot	\$59
62	Soil Boring Abandonment by Grout [all boring diameters]	Per Foot	\$11

CONTRACTOR STANDBY RATE

63	Hollow Stem Auger	Per Hour	\$181
64	All Other Rig Types	Per Hour	\$272

CONTRACTOR WELL INSTALLATION-RELATED ACTIVITIES -

65	2 inch Hollow Stem Auger	Per Foot	\$39
66	4-inch Hollow Stem Auger	Per Foot	\$49
67	6-inch Hollow Stem Auger	Per Foot	\$67
68	2-inch Air Rotary	Per Foot	\$56
69	4-inch Air Rotary	Per Foot	\$65
70	6-inch Air Rotary	Per Foot	\$87
71	2-inch Rotosonic	Per Foot	\$62
72	4-inch Rotosonic	Per Foot	\$66
73	6-inch Rotosonic	Per Foot	\$82
74	2-inch Dual Wall Percussion	Per Foot	\$58
75	4-inch Dual Wall Percussion	Per Foot	\$69
76	6-inch Dual Wall Percussion	Per Foot	\$89
77	Surface Completion / Access Vault <= 12"	\$/Well	\$306
78	Surface Completion / Access Vault >12" to <=24"	\$/Well	\$516

CONTRACTOR MONITOR WELL DEVELOPMENT-RELATED ACTIVITIES -

79	Contractor Mobilization/Demobilization	Per Event	\$498
80	Contractor Travel Cost	Per Mile	\$3
81	2-inch Monitor Well: Depth to Water Less Than 100 Feet	\$/Well	\$482
82	2-Inch Monitor Well: Depth to Water Equal To or Greater Than 100 Feet	\$/Well	\$599
83	4-Inch Monitor Well: Depth to Water Less Than 100 Feet	\$/Well	\$521
84	4-Inch Monitor Well: Depth to Water Equal To or Greater Than 100 Feet	\$/Well	\$629
85	6-Inch Monitor Well: Depth to Water Less Than 100 Feet	\$/Well	\$640

86	6-Inch Monitor Well: Depth to Water Equal To or Greater Than 100 Feet	\$/Well	\$737
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GROUNDWATER MONITORING AND SAMPLING - RELATED ACTIVITIES -

87	Consultant Make Ready	Per Event	\$324
88	Groundwater Monitoring Field Equipment Day Rate [Purging]	Per Day	\$668
89	Groundwater Monitoring Field Equipment Day Rate [Non-Purging]	Per Day	\$479
90	2-inch Monitor Well: Depth to Water Less Than 100 Feet [Purging]	\$/Well	\$436
91	2-Inch Monitor Well: Depth to Water Equal To or Greater Than 100 Feet [Purging]	\$/Well	\$565
92	4-Inch Monitor Well: Depth to Water Less Than 100 Feet [Purging]	\$/Well	\$537
93	4-Inch Monitor Well: Depth to Water Equal To or Greater Than 100 Feet [Purging]	\$/Well	\$661
94	6-Inch Monitor Well: Depth to Water Less Than 100 Feet [Purging]	\$/Well	\$721
95	6-Inch Monitor Well: Depth to Water Equal To or Greater Than 100 Feet [Purging]	\$/Well	\$864
96	Investigative Sampling Methodology [Purging is not required] All depths to water	\$/Well	\$330
97	Consultant Fluid Level Monitoring	\$/Well	\$204
98	Free Product Removal Via Hand Bailing or Hand Pumping	\$/Well	\$501
99	Free Product Removal Via Dedicated Removal Device	\$/Well	\$585

PILOT AND FEASIBILITY TESTING

100	Aquifer Pump Test	Per Event	\$9,027
101	Aquifer Slug Test	Per Event	\$4,217
102	Soil Vapor Extraction Test	Per Event	\$6,826
103	SVE/Air Sparge Test	Per Event	\$8,995
104	Bioremediation Test	Per Event	\$8,582

REMEDIAL ACTIVITIES

105	Remedial Excavation	Per Cubic Yard	\$12
106	Bulk Soil Transportation	Per Ton	\$18
107	Backfill and Compaction Excavation	\$/Ton	\$20
108	Containerized Contaminated Water Disposal	Per Drum	\$138
109	Containerized Contaminated Soil Disposal	Per Drum	\$317
110	Waste Characterization	Per Event	\$1,303
111	Landfill Disposal of Petroleum Contaminated Soil (PCS)	\$/Ton	\$40
112	Thermal Remediation of PCS (Ex-Situ, On-Site, Portable Facility)	\$/Ton	\$53
113	Thermal Remediation of PCS (Ex-Situ, Off-Site, Fixed Facility)	\$/Ton	\$34
114	Bioremediation of PCS (Off-Site, Fixed Facility)	\$/Ton	\$36
115	Construction and Installation of Soil and/or Groundwater Remedial System	Per Event [1]	Bid Process
116	Consultant Cost: Remediation System Operation and Maintenance	\$/Month	\$2,136

REPORTING ACTIVITIES

117	14-Day Release Confirmation Report	Per Report	\$549
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ADEQ-APPROVED STANDARD SITE CHARACTERIZATION REPORT (SCR)

118	ADEQ-Approved SCR; Up To 4 Soil Borings	\$/Report	\$4,157
119	ADEQ-Approved Standard SCR; Incremental Cost Increase Per Soil Boring	\$/Boring	\$290
120	ADEQ-Approved Standard SCR; Up To 4 Groundwater Monitor Wells	\$/Report	\$5,166
121	ADEQ-Approved Standard SCR; Incremental Cost Increase Per Groundwater Monitor Well	\$/Well	\$319
122	ADEQ-Approved Standard SCR; Up to 4 Soil Borings and 4 Groundwater Monitor Wells	\$/Report	\$5,994

REMEDIAL REPORTS

123	First Periodic Groundwater Monitoring Report: Up to 4 Groundwater Monitoring Wells (Includes first sampling event)	\$/Report	\$2,450
124	Initial Periodic Monitoring Report; Incremental Cost for Each Additional Groundwater Monitor Well	Per Well	\$182
125	Subsequent Groundwater Monitoring Report: Up To 4 Groundwater Monitoring Wells (Includes subsequent sampling events)	\$/Report	\$1,620
126	Subsequent Periodic Monitoring Report; Incremental Cost for Each Additional Groundwater Monitor Well	Per Well	\$159
127	Initial Remedial Progress Report (Soil and Groundwater)	\$/Report	\$2,838
128	Subsequent Remedial Progress Report (Soil and Groundwater)	\$/Report	\$2,019
129	Post Remediation Closure Report	\$/Report	\$3,792
130	Site De-Commissioning Letter Report	\$/Report	\$1,316

SAF APPLICATION PREPARATION

131	Pre-approval Application	Per Application	\$998
132	Reimbursement/Direct Pay Application [Less than or Equal to 2 Primary Invoices]	Per Application	\$917
133	Reimbursement/Direct Pay Application [Greater than 2 Less than or Equal to 5 Primary Invoices]	Per Application	\$1,104
134	Reimbursement/Direct Pay Application [Greater than or Equal to 6 Primary Invoices]	Per Application	\$1,344

EQUIPMENT RENTAL RATES

135	SVE System with Thermal Oxidizer (100 cfm)	\$/Month	\$3,215
136	SVE System with Thermal Oxidizer (250 cfm)	\$/Month	\$3,950
137	SVE System with Thermal Oxidizer (500 cfm)	\$/Month	\$4,574
138	SVE System With Thermal Oxidizer [700 cfm]	\$/Month	\$5,498
139	SVE System with Catalytic Oxidizer (100 cfm)	\$/Month	\$3,252
140	SVE System with Catalytic Oxidizer (250 cfm)	\$/Month	\$4,194
141	SVE System with Catalytic Oxidizer (500 cfm)	\$/Month	\$4,980
142	Air Sparge System [up to 100 cfm and up to 12 psi]	\$/Month	\$1,010
143	Air Sparge System [up to 100 cfm and 13 psi to 100 psi]	\$/Month	\$1,274
144	SVE/Air Sparge Portable Pilot Test Unit	\$/Day	\$2,496
145	Blower, 160 CFM	\$/Month	\$1,037
146	Blower, 280 CFM	\$/Month	\$1,329

147	Manual-Operated Hand Auger Sampling Kit (Hand Auger/Brass Sleeves)	\$/Day	\$67
148	50 Gallon DOT-approved Drum	\$/Drum	\$58

LABORATORY RATES

MOBILE LABORATORY RATES

149	Mobile Lab Mobilization/Demobilization Rate for a One Person Crew	Per Event	\$559
150	Mobile Lab Mobilization/Demobilization Rate for a Two Person Crew	Per Event	\$389
151	Mobile Lab - Mobilization/Demobilization Incremental Travel Rate for a One Person Crew	Per Mile	\$2
152	Mobile Lab - Mobilization/Demobilization Incremental Travel Rate for a Two Person Crew	Per Mile	\$2
153	On-Site Mobile Lab Rate for a One Person Crew (Includes Soil and GW analyses)	\$/Hour	\$173
154	On-Site Mobile Lab Rate for a Two Person Crew (Includes Soil and GW analyses)	\$/Hour	\$258

ORGANIC ANALYSIS

155	Total Petroleum Hydrocarbons (TPH) by ADHS Method 418.1 AZ (Soil Only)	\$/Sample	\$71
156	Hydrocarbons by ADHS Method 8015AZR1 (Soil Only)	\$/Sample	\$94
157	Hydrocarbons by ADHS Method 8015AZR1-Modified (Air Only)	\$/Sample	\$106
158	Hydrocarbons/BTEX by EPA Method 8015AZR1(Modified)/8021B (Air Only)	\$/Sample	\$129

159	Aromatic VOC's (BTEX) By EPA Method 8021B (Soil Only)	\$/Sample	\$94
160	Halogenated VOC's (BTEX) by EPA Method 8021B Arizona Target Compounds (Soil Only)	\$/Sample	\$135
161	EPA Method 8021B; Arizona Target Compounds (Soil Only)	\$/Sample	\$160
162	Full List VOC's by EPA Method 8021B (Soil Only)	\$/Sample	\$208

163	Aromatic VOC's (BTEX) by EPA Method 8021B (Groundwater Only)	\$/Sample	\$98
164	Halogenated VOC's (BTEX) by EPA Method 8021B Arizona Target Compounds (Groundwater Only)	\$/Sample	\$141
165	EPA Method 8021B; Arizona Target Compounds (Groundwater Only)	\$/Sample	\$164
166	Full List VOC's by EPA Method 8021B (Groundwater Only)	\$/Sample	\$202

167	Aromatic VOCs (BTEX) by EPA Method 8021B (Air Only)	\$/Sample	\$142
168	Halogenated VOCs by EPA Method 8021B Arizona Target Compounds (Air Only)	\$/Sample	\$177

169	EPA Method 8260B; Arizona Target Compounds (Soil Only)	\$/Sample	\$223
170	Full List VOCs by EPA Method 8260B (Soil Only)	\$/Sample	\$238

171	EPA Method 8260B; Arizona Target Compounds (Groundwater Only)	\$/Sample	\$225
172	Full List VOCs by EPA Method 8260B (Groundwater Only)	\$/Sample	\$239

POLYNUCLEAR AROMATIC HYDROCARBONS (PAHs)

173	Semi-Volatile Organics by EPA Method 8270C - base neutral (Soil Only)	\$/Sample	\$233
174	Semi-Volatile Organics by EPA Method 8270C - base neutral (Groundwater Only)	\$/Sample	\$252
175	Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8310 (Soil Only)	\$/Sample	\$175
176	Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8310 (Groundwater Only)	\$/Sample	\$174

WASTE CHARACTERIZATION ANALYSIS

177	TPH by EPA Method 418.1 (Groundwater Only) - FOR WASTE CHARACTERIZATION AND PERMIT REQUIREMENT PURPOSES ONLY	\$/Sample	\$75
178	TCLP Extraction Lead (Pb) Analysis by EPA Method 1311 and the appropriate SW846 EPA Method	\$/Sample	\$112
179	TCLP Extraction by EPA Method 1311 - Analysis of 8 RCRA Metals by appropriate SW846 EPA Method	\$/Sample	\$250
180	Ignitability Test by EPA Method 1010 (Liquid Only)	\$/Sample	\$46
181	Ignitability Test by EPA Method 1010 Modified (Soil Only)	\$/Sample	\$47
182	Corrositivity pH by EPA Method 9045 (Soil Only)	\$/Sample	\$20
183	Corrositivity pH by EPA Method 9040 (GW Only)	\$/Sample	\$19
184	Paint Filter Free Liquids by EPA Method 9095	\$/Sample	\$21
185	PCB's by EPA Method 8082 (Soil Only]	\$/Sample	\$121
186	Lead (Pb) by an approved SW846 EPA Method (Soil Only)	\$/Sample	\$35

BIOFEASIBILITY / BIOTREATABILITY ANALYSIS

187	Phosphate-P by an approved EPA/ASTM Method (Soil Only)	\$/Sample	\$38
188	Nitrate + nitrite-N by an approved EPA/ASTM Method (Soil Only)	\$/Sample	\$42
189	Nitrogen (Soil Only)	\$/Sample	\$44
190	Alkalinity by EPA Method 310.1 (Groundwater Only)	\$/Sample	\$21
191	Total Organic Carbon by EPA Method 415.1	\$/Sample	\$50
192	Total Organic Carbon by EPA Method 9060	\$/Sample	\$63
193	Ammonia by EPA Method 350.3 or other ASTM Method (Groundwater Only)	\$/Sample	\$30
194	Sulfate by EPA Method 375.2 or other ASTM Method (Groundwater Only)	\$/Sample	\$26
195	Nitrate by EPA Method 353.2 (Groundwater Only)	\$/Sample	\$26
196	Alkalinity by EPA Method 310.1 Modified (Soil Only)	\$/Sample	\$22
197	Total Dissolved Solids by EPA Method 160.1	\$/Sample	\$20
198	Total Dissolved Solids by EPA Method 160.3	\$/Sample	\$19
199	Biochemical Oxygen Demand (BOD) by EPA Method 405.1(Aqueous Matrices Only)	\$/Sample	\$48

NOTES: 1 Source - Bureau of Labor of Statistics Producer Price Index for Finished Goods Less Food and Energy Not Seasonally Adjusted.

Unadjusted percent change for Fiscal Year 2001 (July 2000 through June 2001).

